BRUHAT BANGALORE MAHANAGARA PALIKE

YELAHANKA ZONE

Name of work:"Consultancy services for preparation of DPR for the work of Construction of RCC Drain and Culverts at Brundavan layout, Hariraja layout, Hanumappa layout and surrounding areas in ward no -03 Yelahanka Satellite Town sub Division. "Est cost Rs. 175 Lakhs"

Sl N	Description of Item	Estimate Cost Rs.							17500000
		Unit	No	L	B	D	Qty	Rate	Amount
1	KSRRB 300-1. Earth work excavation by manual means in Ordinary Soil soil involving an average horizontal throw upto 2 meters and an average lift upto 0.5m, excavated surface leveled and sides neatly dressed, the disposed earth to be leveled neatly after breaking of clods complete as per specifications complete as per specifications MORTH chapter 3. P No. 143/ Item No. 19.1/ PWD SR 2018-19								
	RCC Drain	Cum							
	Brundavan Layout								
	Brundavan Layout 1st main road		2	172	1 1	0 9	341 02		
	Brundavan Layout 2nd main road		2	150	1 1	0 9	297 15		
	Brundavan layout Cross road		2	25	1 1	0 9	49 50		
	BHEL Layout								
	BHEL 1st Main road		2	105	1 1	0 9	207 90		
	BHEL 11th cross road		2	60	1 1	0 9	118 80		
	BHEL 10th cross road		2	165	1 1	0 9	326 70		
	BHEL 9th cross road		2	67	1 1	0 9	132 66		
	BHEL 8th cross road		2	30	1 1	0 9	59 40		
	Hariraja Layout		2	90	1 1	0 9	178 20		
	For Kerb								
	Brundavan Layout								
	Brundavan Layout 1st main road		2	172	0 2	0 2	13 76		
	Brundavan Layout 2nd main road		2	150	0 2	0 2	12 00		
	Brundavan layout Cross road		2	25	0 2	0 2	2 00		
	BHEL Layout								
	BHEL 1st Main road		2	105	0 2	0 2	8 40		
	BHEL 11th cross road		2	60	0 2	0 2	4 80		
	BHEL 10th cross road		2	165	0 2	0 2	13 20		
	BHEL 9th cross road		2	67	0 2	0 2	5 35		
	BHEL 8th cross road		2	30	0 2	0 2	2 40		
	Hariraja Layout		2	90	0 2	0 2	7 20		
	Culvert		2	6	1 2	1	14 40		
	Culvert		6	7.5	1 2	1	54.00		
						Cum	1848.88	211 79	391573
	Basic Rate	179.00							
	lead and lift	21							
	Area Weightage @ 6%	11.99							
	Total	211.79							
2	KSRRBM2001 Plain cement concrete M10 mix with crushed stone aggregate 40mm nominal size mechanically mixed placed in foundation and compacted by vibration including curing including cost of materials,labour, HOM complete as per the specification Specification No P No. 254/ Item No. 34 2/ PWD SR 2018-19								
		cum							
	RCC Drain								
	Brundavan Layout								
	Brundavan Layout 1st main road		2	172	1 1	0 15	50 76		
	Brundavan Layout 2nd main road		2	150	1 1	0 15	48 70		
	Brundavan layout Cross road		2	25	1 1	0 15	8 25		
	BHEL Layout								
	BHEL 1st Main road		2	105	1 1	0 15	34 65		
	BHEL 11th cross road		2	60	1 1	0 15	19 80		
	BHEL 10th cross road		2	165	1 1	0 15	54 45		
	BHEL 9th cross road		2	67	1 1	0 15	22 11		
	BHEL 8th cross road		2	30	1 1	0 15	9 90		
	Hariraja Layout		2	90	1 1	0 15	29 70		
	For Kerb								
	Brundavan Layout								
	Brundavan Layout 1st main road		2	172	0 2	0 1	0 88		
	Brundavan Layout 2nd main road		2	150	0 2	0 1	5 01		
	Brundavan layout Cross road		2	25	0 2	0 1	1 00		

Sl N	Description of Item	Unit	No	L	B	D	Qty	Rate	Amount
	BHEL Layout								
	BHEL 1st Main road								
	BHEL 11th cross road		2	105	0 2	0 1	4 20		
	BHEL 10th cross road		2	60	0 2	0 1	2 40		
	BHEL 9th cross road		2	165	0 2	0 1	6 60		
	BHEL 8th cross road		2	67	0 2	0 1	2 68		
	Hanraja Layout		2	30	0 2	0 1	1 20		
			2	90	0 2	0 1	3 60		
	Culvert								
	Culvert		2	6 0	1 2	0 15	2 10		
			6	7 5	1 2	0 15	8 10		
	Basic Rate	4226				cum	329 11	4479 56	1474250
	Area Weightage @ 6%	253.56							
	Total	4479.56							
3	300 kgs. with 20mm and down size granite metal coarse aggregates at 0.69 cum and fine aggregates at 0 43 cum machine mixed, well compacted for walls and bottom including centering, shuttering, cost of materials, HOM of machinery, curing etc., complete excluding cost of steel as per MORTH specification No 1500, 1700, 2200 including cost of materials, labour, HOM complete as per specifications Item No 37 59 2/ page no 271/PWD SR								
	RCC Drain Raft				Cum				
	Brundavan Layout								
	Brundavan Layout 1st main road		2	172	0 9	0 15	46 44		
	Brundavan Layout 2nd main road		2	150	0 9	0 15	40 50		
	Brundavan layout Cross road		2	25	0 9	0 15	6 75		
	BHEL Layout								
	BHEL 1st Main road		2	105	0 9	0 15	28 35		
	BHEL 11th cross road		2	60	0 9	0 15	16 20		
	BHEL 10th cross road		2	165	0 9	0 15	44 55		
	BHEL 9th cross road		2	67	0 9	0 15	18 09		
	BHEL 8th cross road		2	30	0 9	0 15	8 10		
	Hanraja Layout		2	90	0 9	0 15	24 30		
	RCC Drain wall								
	Brundavan Layout								
	Brundavan Layout 1st main road		4	172	0 15	0 6	61 92		
	Brundavan Layout 2nd main road		4	150	0 15	0 6	54 00		
	Brundavan layout Cross road		4	25	0 15	0 5	7 50		
	BHEL Layout								
	BHEL 1st Main road		4	105	0 15	0 6	38 45		
	BHEL 11th cross road		4	60	0 15	0 6	21 60		
	BHEL 10th cross road		4	165	0 15	0 6	59 40		
	BHEL 9th cross road		4	67	0 15	0 6	22 79		
	BHEL 8th cross road		4	30	0 15	0 6	10 08		
	Hanraja Layout		4	90	0 15	0 6	32 40		
	Culvert								
	Raft		2	6 0	1 2	0 25	3 60		
	wall		2x2	6 0	0 2	0 45	2 16		
	Culvert								
	Raft		6	7 5	1 2	0 25	13 50		
	wall		6x2	7 5	0 2	0 45	8 10		
						Cum	568 70	7070 2	4021372-
	Basic Rate	6670							
	Area Weightage @ 6%	400.2			For Steel		27.36	Culvert	
	Total	7070.2			calculation		541.42	Drain	
4	KSRB 4 9 2 Providing T.M.T steel reinforcement for R.C.C work including straightening, cutting, bending, hooking, placing in position, lapping and / or welding wherever required, tying with binding wire and anchoring to the adjoining members wherever necessary complete as per design (laps, hooks and wastage shall not be measured and paid) cost of materials, labour, HOM complete as per specifications. Specificatio (I No-28 8 2,P No-220)								
					Tonne				
	All Culverts and Drains included								
	60kg/Cum for Culvert		60	27.36			2101 65		
	60kg/Cum For Drain		60	541.417044			32485 06		
						Tonne	34.65	72326.98	2505891

Sl No	Description of Item	Unit	No	L	B	D	Qty	Rate	Amount
	Basic Rate	68233							
	Area Weightage @ 6%	4093.98							
	Total	72327							
5	Providing and Fixing ,pre cast covering slab made out of CC 1 2 4 with 10cm thick and finishing cutting ,including form work,curing,including cost of alll materials, labour,hire charges of machinery,loading,unloading,lead and lift,transportation etc ,copmplete. (Data Rate)								
	RCC Drain					Sqm			
	Brundavan Layout								
	Brundavan Layout 1st main road		2	172	0 9		309 60		
	Brundavan Layout 2nd main road		2	150	0 9		270 00		
	Brundavan layout Cross road		2	25	0 75		37 50		
	BHEL Layout								
	BHEL 1st Main road		2	107	0 75		161 22		
	BHEL 11th cross road		2	60	0 75		90 00		
	BHEL 10th cross road		2	165	0 75		247 50		
	BHEL 9th cross road		2	67	0 9		120 60		
	BHEL 8th cross road		2	30	0 75		45 00		
	Hanraja Layout		2	90	0 75		135 00		
						Sqm	1416.42	2337	3310174
	Data Rate	2337							
6	Providing and Fixing pre cast covering Slab 250mm thick made out of CC 1 2 4 and jelly 20mm Down site with steel reinforcement including form work,curing,including cost of alll materials, labour,hire charges of machinery, loading, unloading, lead and lift,transportation etc ,complete As per Engineer Incharge								
	BHEL Layout /Brundavan Layout					Sqm			
	Culvert		2	6 0	1 2		14 4		
	Culvert		6	7 5	1 2		53 52		
						Sqm	67 92	5418	367991
	Data Rate	5418							
7	5.29(b) Providing and fixing pre cast solid cement concrete kerb stones made out of C C 1 2 4 with top and bottom width 114 and 165mm repectively, 400mm high and 450mm in length finished with CM 1 3 plastering and finishing cutting, including formwork curing, including, cost of all materials, labour hire charges of machinery, loading unloading, lead and lift, transportation etc, complete. Page No. 27/ Item No. 5.30/ PWD SR 2018-19								
	RCC Drain					Nos			
	Brundavan Layout								
	Brundavan Layout 1st main road		2	172			344 00		
	Brundavan Layout 2nd main road		2	150			300 00		
	Brundavan layout Cross road		2	25			50 00		
	BHEL Layout								
	BHEL 1st Main road		2	107			214 00		
	BHEL 11th cross road		2	60			120 00		
	BHEL 10th cross road		2	165			330 00		
	BHEL 9th cross road		2	67			134 00		
	BHEL 8th cross road		2	30			60 00		
	Hanraja Layout		2	90			180 00		
	Deduction of Kerbs due to Trees, Poles and Shoulders						-50		
							1674 20		
				l,e 1705/0.45			3720.44		
						Nos	3720	477	1774440.00
	Basic Rate	450							
	Area Weightage @ 6%	27							
	Total	477							
8	KSRRB 600-1 Painting two coats after filling the surface with synthetic enamel paint in approved shades on new plastered concrete surfaces, with materials, labour complete as per specifications MORTH Chapter 8 (P No 180, I No 24 1 of PW, P&IWTD SR 2018-19)								
						Sqm			
	RCC Drain								
	Brundavan Layout								

Sl No	Description of Item	Unit	No	L	B	D	Qty	Rate	Amount
	Brundavan Layout 1st main road		2	172		0.3	103.20		
	Brundavan Layout 2nd main road		2	150		0.3	90.00		
	Brundavan layout Cross road		2	25		0.3	15.00		
	BHEL Layout								
	BHEL 1st Main road		2	107		0.3	64.40		
	BHEL 11th cross road		2	60		0.3	36.00		
	BHEL 10th cross road		2	165		0.3	99.00		
	BHEL 9th cross road		2	67		0.3	40.20		
	BHEL 8th cross road		2	30		0.3	18.00		
	Harirajа Layout		2	90		0.3	54.00		
	Deduction of Kerbs due to Trees, Poles and Shoulders		2	27		0.3	-15.99		
						Sqm	503.90	84.8	42731
	Basic Rate	80							
	Area Weightage @ 6%	4.8							
	Total	84.8							
9	KSRRB M300-13 Excavation for roadway in hard rock (requiring blasting) by drilling, blasting and breaking, trimming of bottom and side slopes in accordance with requirements of lines, grades and cross sections, loading and stacking at site of cut road with a lead of 1.00 km and complete as per specifications. (Excavated rock credited to contractor)								
	New Roads					Cum			
	BHEL 9th cross road		1	71	5	0.45	159.75		
	BHEL 8th cross road		1	31	5	0.45	69.75		
						Cum	229.50	43.45	9974
	Basic Rate	41							
	Area Weightage @ 6%	2.46							
	Total	43.46							
10	stone aggregates of granite/ trap/basalt material, mixing in a mechanical mix plant at OMC, Carriage of mixed material to work site, spreading in uniform layers with motor grader on prepared surface and compacting with vibratory power roller to achieve the 98 % proctor density, complete as per specifications Clause 401 of MORTH V Revison (I No-20 5,P No-153)								
						Cum			
	New Roads								
	BHEL 9th cross road		1	71	5	0.15	53.25		
	BHEL 8th cross road		1	31	5	0.15	23.25		
						Cum	76.50	1855	141908
	Basic Rate	1750							
	Area Weightage @ 6%	105							
	Total	1855							
11	KSRRB M400-17 Providing, laying, spreading and compacting crushed stone aggregates of granite / trap / basalt to wet mix macadam specifications including pre mixing the material with water at OMC in mechanical mix plant carriage of mixed materials by tipper to site, laying in uniform layers with paver in sub-base/base course on well prepared surface and compacting with vibratory roller to achieve the desired density complete as per specifications(P No-155,I No-20.18)								
						Cum			
	New Roads								
	BHEL 9th cross road		1	71	5	0.23	81.65		
	BHEL 8th cross road		1	31	5	0.23	35.65		
						Cum	117.30	2001.28	234750
	Basic Rate	1888							
	Area Weightage @ 6%	113.28							
	Total	2001.28							
12	KSRRB M500-6 Providing and applying primer coat with 5 5 bitumen emulsion on prepared surface of granular base such as WMM including cleaning of road surface and spraying primer at the rate of 0.60 kg / sqm using mechanical means complete as per specifications Clause 502 of MORTH V revision(P.No-158,I No-21.6)								
						Sqm			
	Roads								
	BHEL 9th cross road		1	71	5		355.00		
	BHEL 8th cross road		1	31	5		155.00		
						Sqm	510.00	33.92	17299
	Basic Rate	32							
	Area Weightage @ 6%	1.92							
	Total	33.92							

Sl N	Description of Item	Unit	No	L	B	D	Qty	Rate	Amount
13	KSRRB 500-11 Providing and laying bituminous macadam on Prepared Surface with crushed Coarse aggregates as per Design mix formulae for base/binding course including loading of aggregates with F E loader,Hot mixing of Stone aggregates and bitumen in Hot mix plant, transporting the mixed material in tipper to paver and laying mixed materials with paver finisher to the required level and grade, rolling by power roller to achieve desired density, but excluding cost of primer/Tack coat including lead, lift and cost of all materials, labour HOM of machinaries complete as per Specifications. MORTH Ch 5. using 40/60 TPH capacity HMP with Mechanical paver Gr-II (50mm - 75mm) with 3.4% VG-30 bitumen (P.No-159,I.No-21.11.6)								
		Cum							
	Roads								
	BHEL 9th cross road		1	71	5	0.05	17.75		
	BHEL 8th cross road		1	31	5	0.05	7.75		
						Cum	25.50	7428.48	189426
	Basic Rate	7008							
	Area Weightage @ 6%	420.48							
	Total	7428.48							
14	KSRRB M500-2 Cleaning the existing black topped surface with brooms, soft brushs and finally dusting with old gunny bags and compressed air to receive bituminous tratement including cost of all materials, labours, HOM complete as per specifications. P No. 158/ Item No. 21.2/ PWD SR 2018-19								
		Sqm							
	Roads								
	BHEL 9th cross road		1	71	5		355.00		
	BHEL 8th cross road		1	31	5		155.00		
						Sqm	510.00	5.3	2703
	Basic Rate	5							
	Area Weightage @ 6%	0.3							
	Total	5.3							
15	KSRRB M500-10 Tack Coat.- Providing and applying tack coat using 80/100 grade bitumen (VG 10) in boiler fitted with spray set distributor at the rate of 0.20 kg per sqm on the existing prepared bituminous surface cleaned with mechanical broom, complete as per specifications. MORTH Specification No. 503 (P-159, Item no 21.10)								
		Sqm							
	Roads								
	BHEL 9th cross road		1	71	5		355.00		
	BHEL 8th cross road		1	31	5		155.00		
						Sqm	510.00	12.72	6487
	Basic Rate	12							
	Area Weightage @ 6%	0.72							
	Total	12.72							
16	KSRRB M500-19 Providing and laying bituminous concrete (crush granite with 100-120 TPH Batch type hot mix plant producing an average output of 75 tonnes per hour using crushed aggregates of specified grading, premixed with bituminous binder at 5.4 to 5.6% of mix and filler, transporting the hot mix to work site laying with hydrostatic paver finisher with sensor contucl to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem roller to achieve the desire compaction as per MORTH specification clause No. 500.9 complete in all respects as per specifications MORTH specification 30-45mm compacted thickness (Gradingll) With 6% bitumen 80/100, No. 161/ Item No. 21.22.6/ PWD SR 2018-19								
		Cum							
	Roads		1	71	5	0.04	14.20		
	BHEL 9th cross road		1	31	5	0.04	6.20		
	BHEL 8th cross road					Cum	20.40	8831.92	180171
	Basic Rate	8332							
	Area Weightage @ 6%	499.92							
	Total	8831.92							
17	KSRRB M500-13 Providing and laying of hot applied thermoplastic compound 2.5 mm thick reflectorising reflectorising glass beads at 250 gms per sqm area, thickness of 2.5 mm is exclusive of surface applied glass beads as per IRC 35. The finished surface to be level, uniform and free from streaks and holes complete as per specifications. MORTH Specification No. 803 (Page No 181., I.No.24.15 of KPWD S.R 2015-16)								
		Sqm							
	Roads		2	71	0.1		14.20		
	BHEL 9th cross road		2	31	0.1		6.20		
	BHEL 8th cross road					Sqm	20.40	454.74	9277
	Basic Rate	429							
	Area Weightage @ 6%	25.74							
	Total	454.74							

Sl No	Description of Item	Unit	No	L	B	D	Qty	Rate	Amount
19	For 12% Applicable GST						Grand Total		14934284
20	For 4% KRIDL Charges								1792114
21	For 1% DPR and PMC Charges								597371.36
22	Miscellaneous Charges	LS							175000
									1230.64
									17500000

Certificate:

1. The work spot has been inspected and the work is found necessary
2. This estimate is prepared as per PWD SR of 2018-19
3. The provisions were made in this estimate are necessary and adequate
4. This works come under B B M P limits

Junior/Assistant Engineer

AE-3

Executive Engineer
Yelahanka Satellite Town sub Division

Assistant Executive Engineer
Yelahanka Satellite Town sub Division

Transtelight Consultants Pvt. Ltd. Bangalore

Administrative Sanction for Rs 1.75 crs Lakhs
one crore seventy five Lakhs
is accorded under head P-3749
E.M. - Nava Nagarothana 110 Villages
grants (Annexure-01)
Registered as CE NO ... ject
to conditions contained in
No EE/YNK/57/2019-20 /11/2019

Executive Engineer

Technical Sanction
Accorded For Rs 135 Lakhs
Head of A/c P3749
CEN NO 201 Dt 05/11/19

[illegible] CE (YNK)